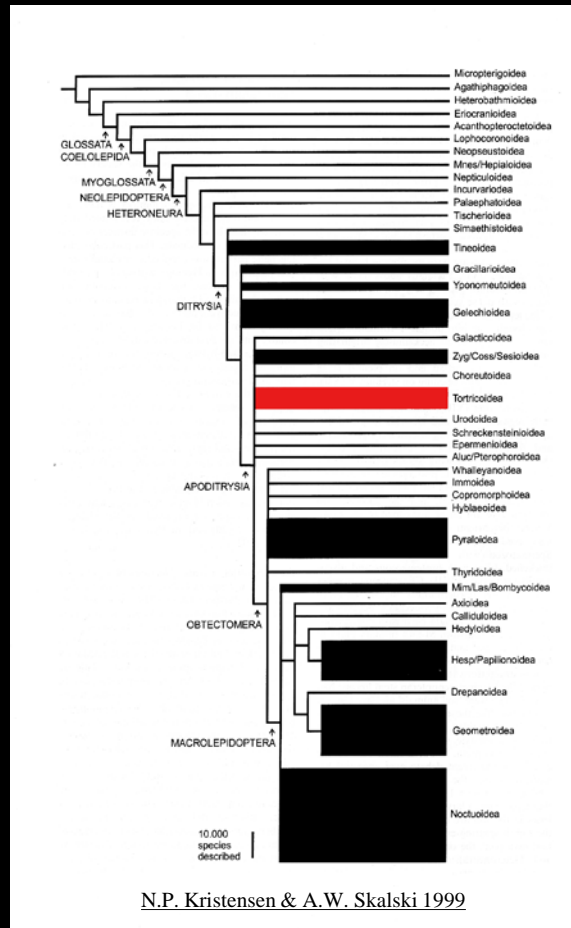


Review of Tortricidae



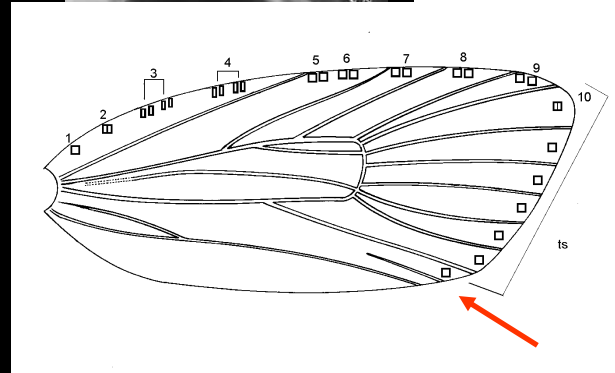
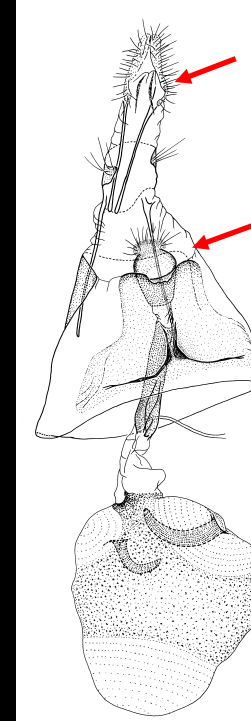
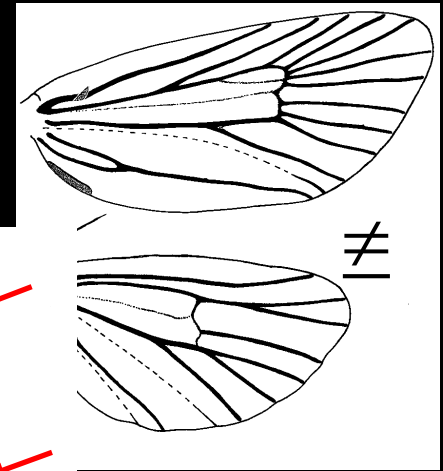
What's a tortricoid

Heteroneura

Ditrysia

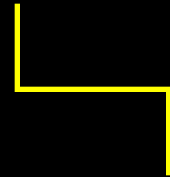
Proboscis unscaled

CuP fw developed



What's a tortricoid

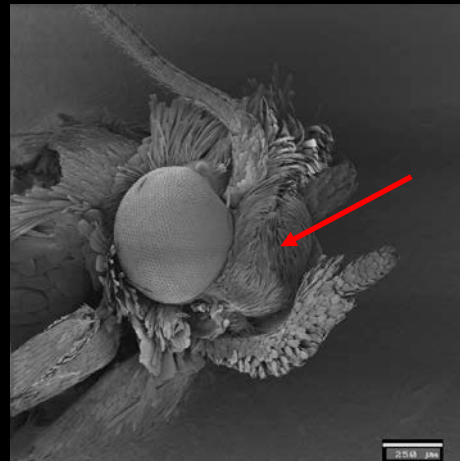
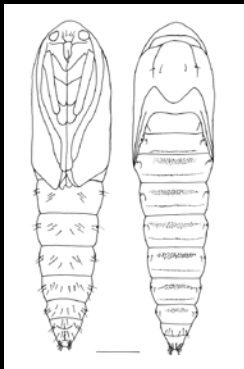
Chaetosemata and
ocelli



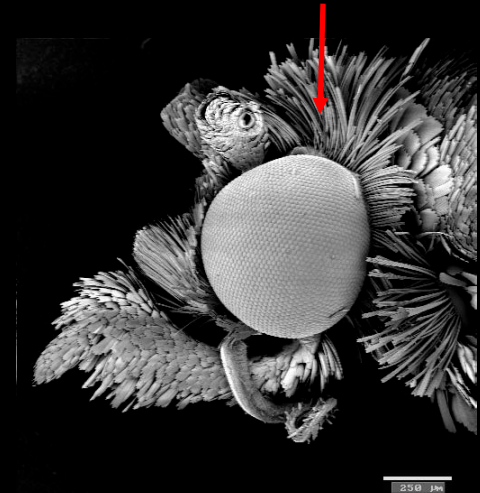
Apoditrysian
Sternum A2



Lower part of frons with
ascending scales



Tortricidae

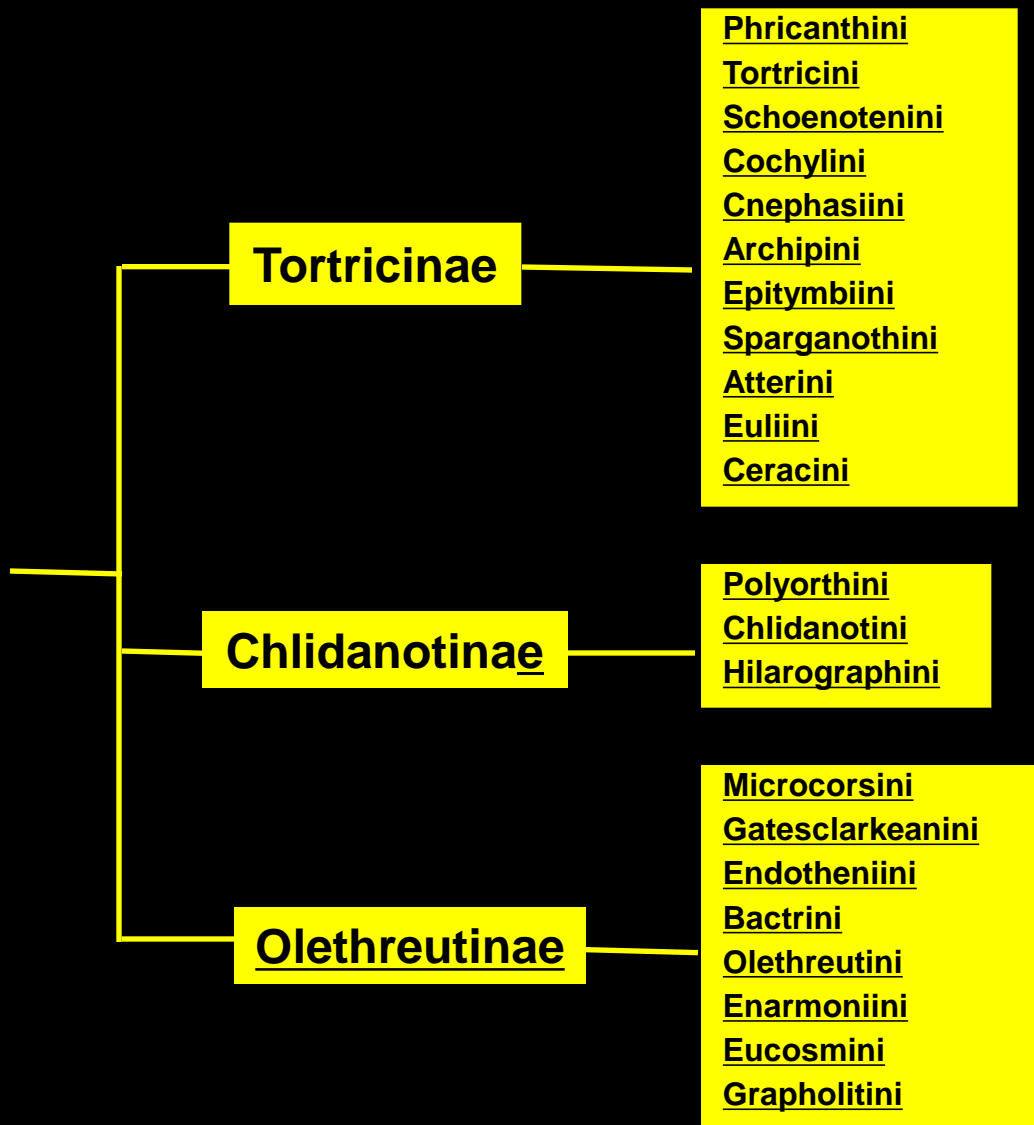
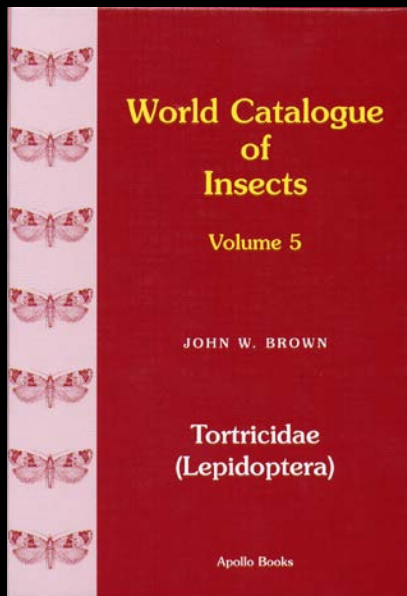


Tortricidae Classification

21 tribes

957 genera

10,000+ species



Tortricinae: Tortricini

- 437 spp.
- Single eggs
- Leaf rollers
- Extreme variation



Jason Dombroskie



Acleris variana

Tortricinae: Sparganothini

- 167 spp.
- Long palpi, many yellow spp.
- Eggs in imbricated groups
- Polyphagous leafrollers



Jim Vargo



Tortricinae: Archipini

- 1618 spp.
- Imbricate eggs
- Leafrollers, many polyphagous
- Many pests, e.g.,
Spruce budworm,
LBAM,



Tortricinae: Cochylini

- 988 spp.
- Internal oligophagous feeders- flower heads, seeds, stems, roots.



Olethreutinae: Olethreutini

- 1400 spp.
- Wings rolled around body
- Leafrollers
- Oligophagous to polyphagous
- Eggs single



Olethreutinae: Eucosmini

- 1000 spp.
- Leafrollers/webbers in basal genera
- Stem/root borers in derived genera
- Oligophagous

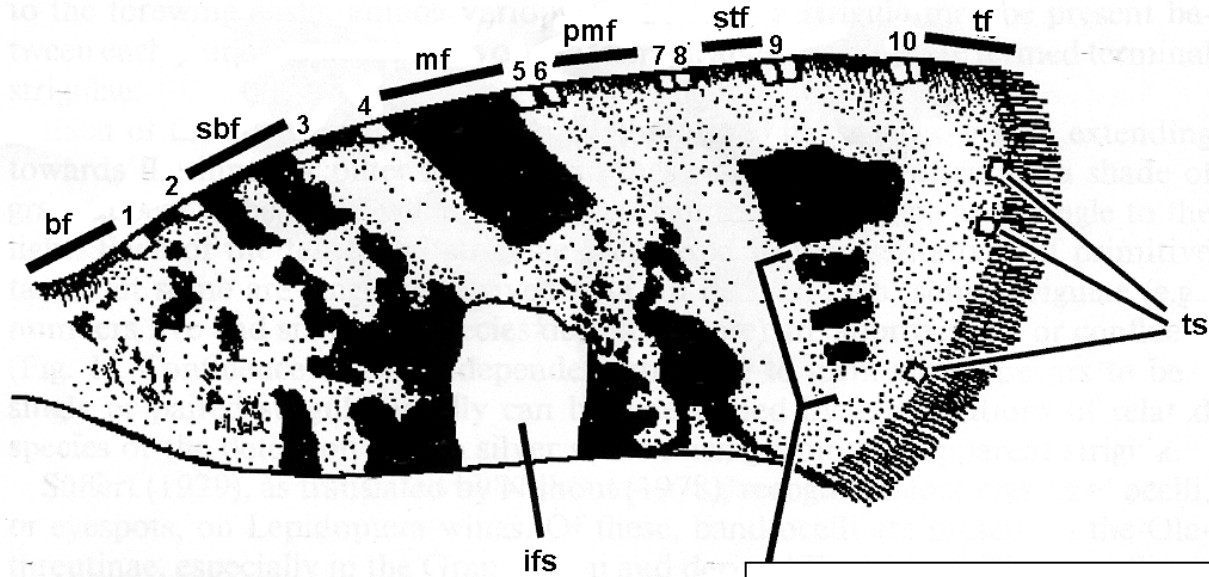


Olethreutinae: Grapholitini

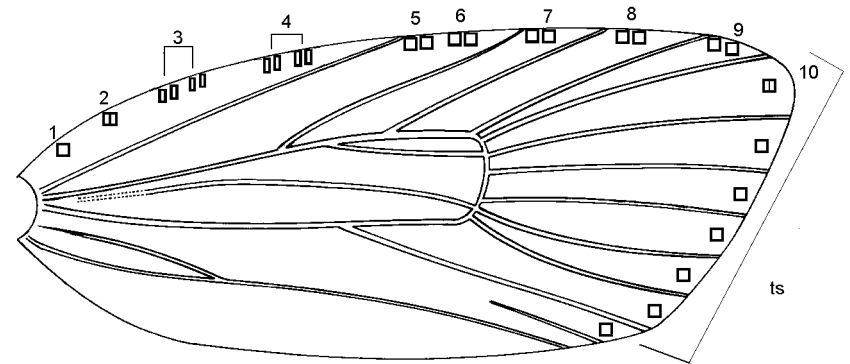
- 600 spp.
- Internal feeders in fruits/seeds; some stem borers
- Oligophagous

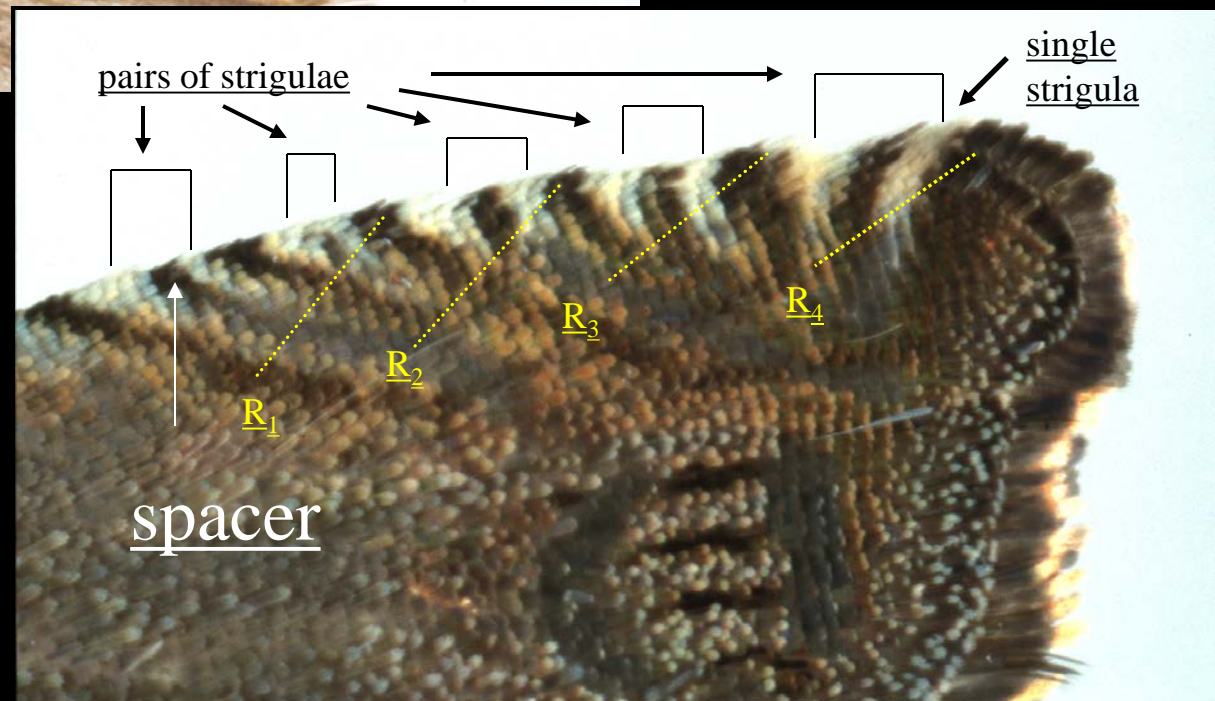
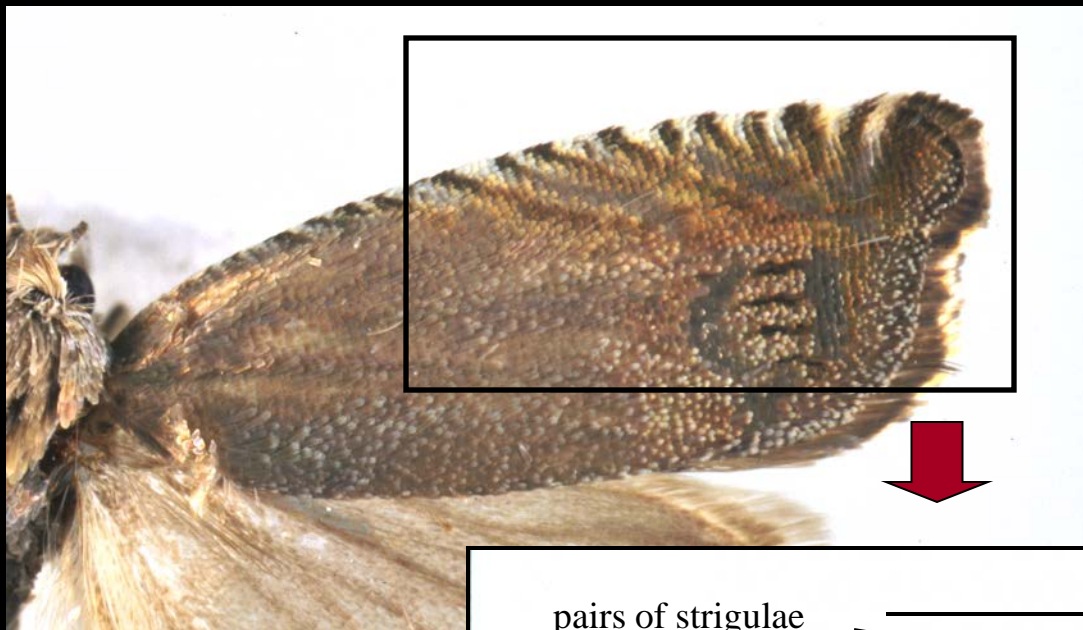


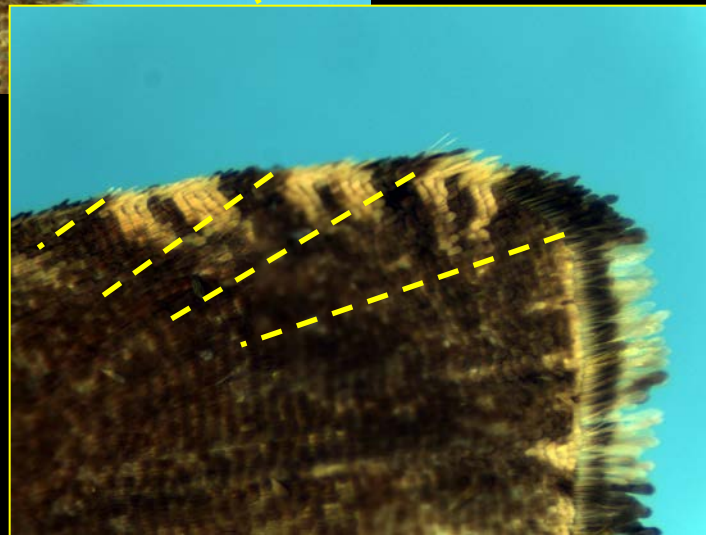
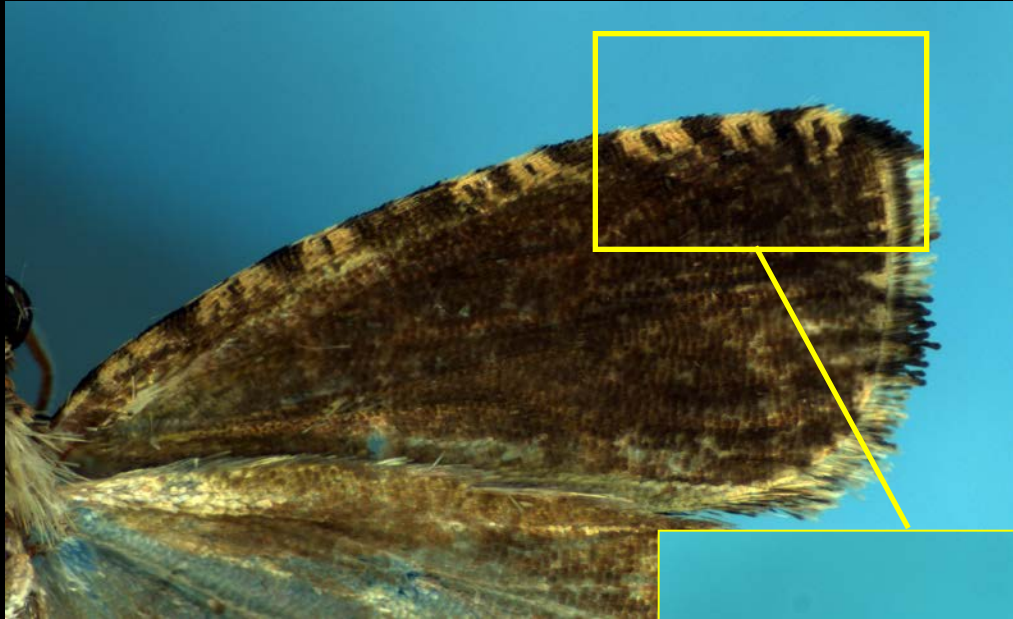
Brown & Powell 1991



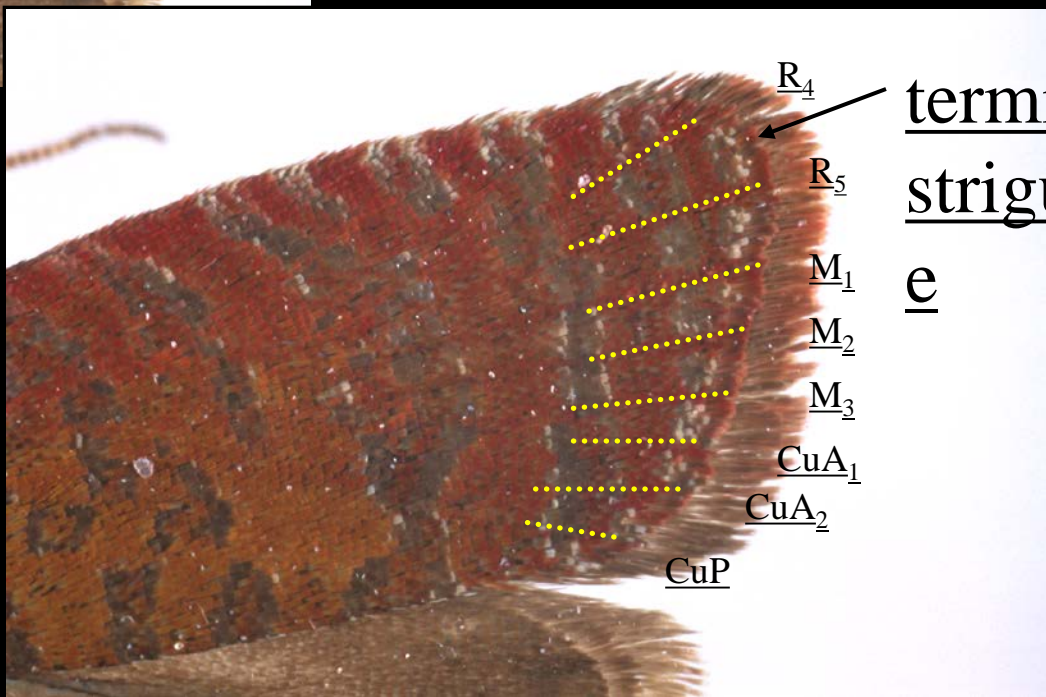
Baixeras 2002

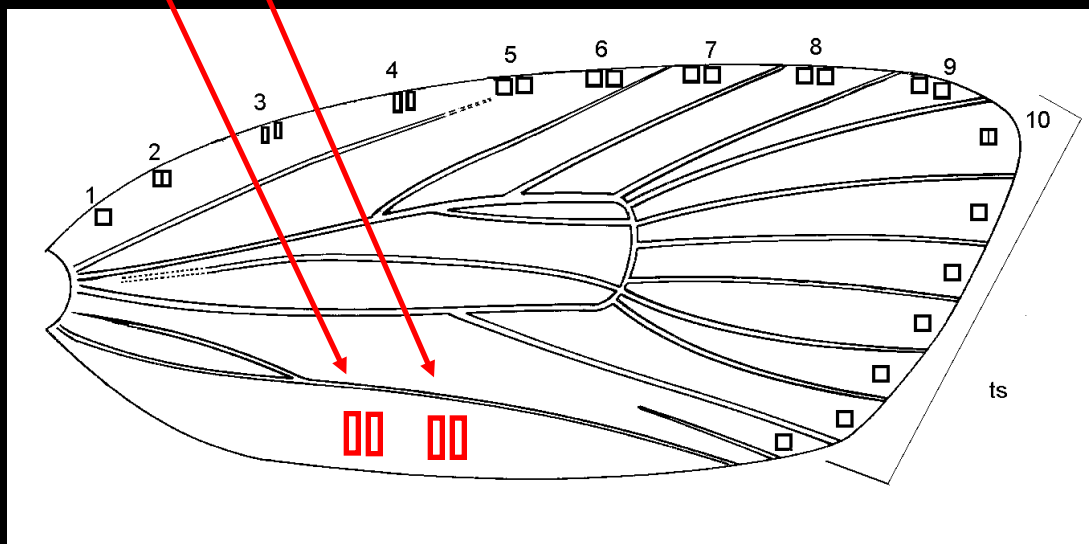


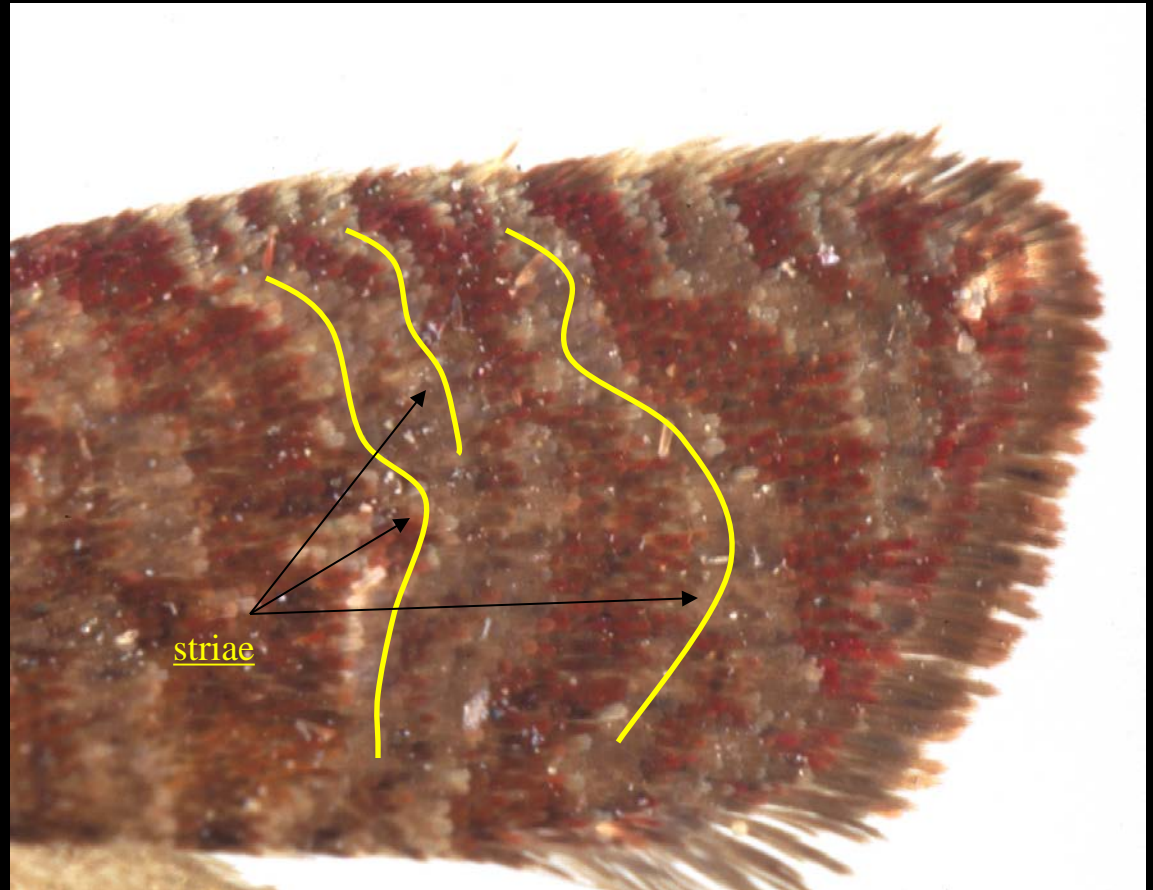


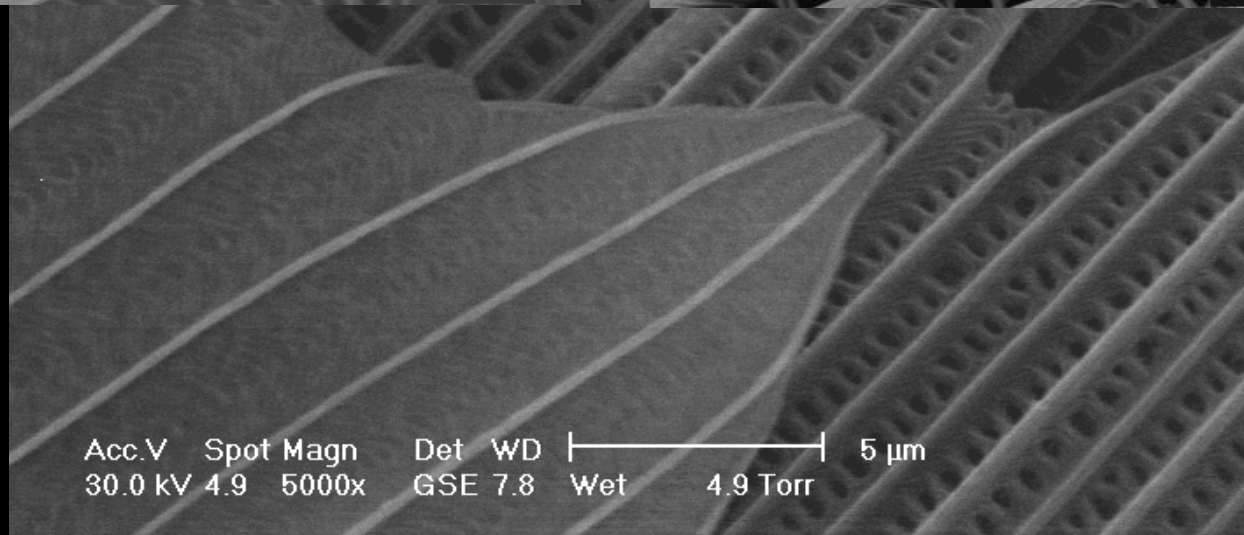
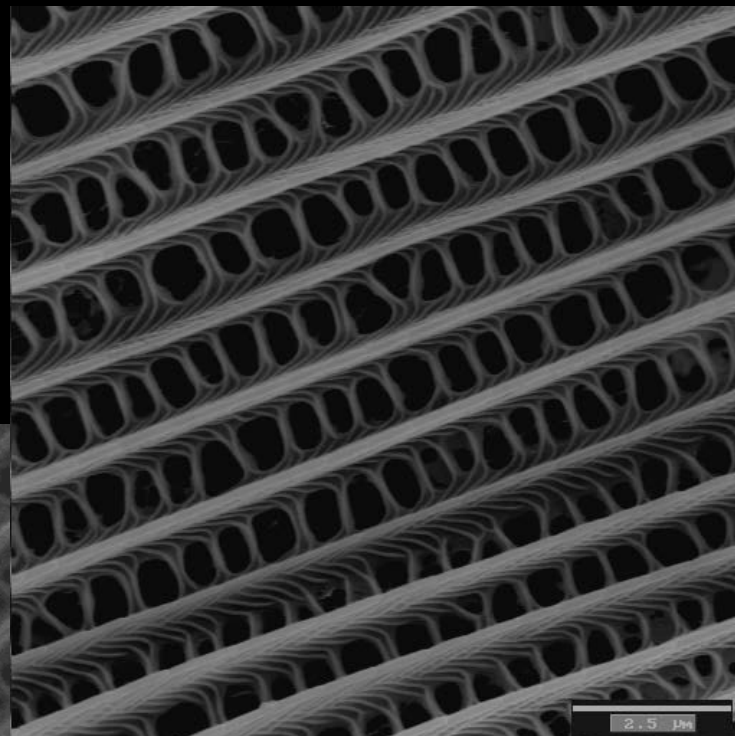
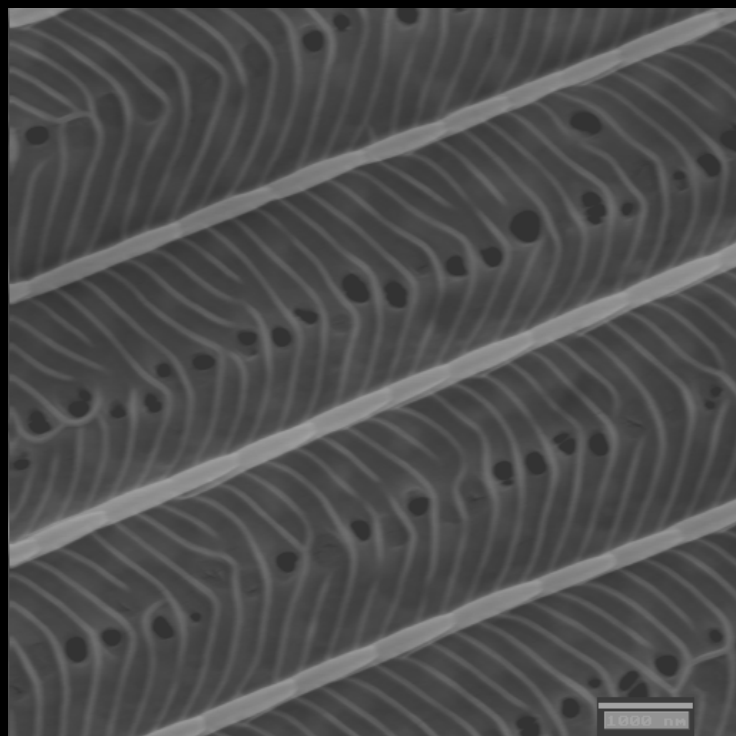


Underside



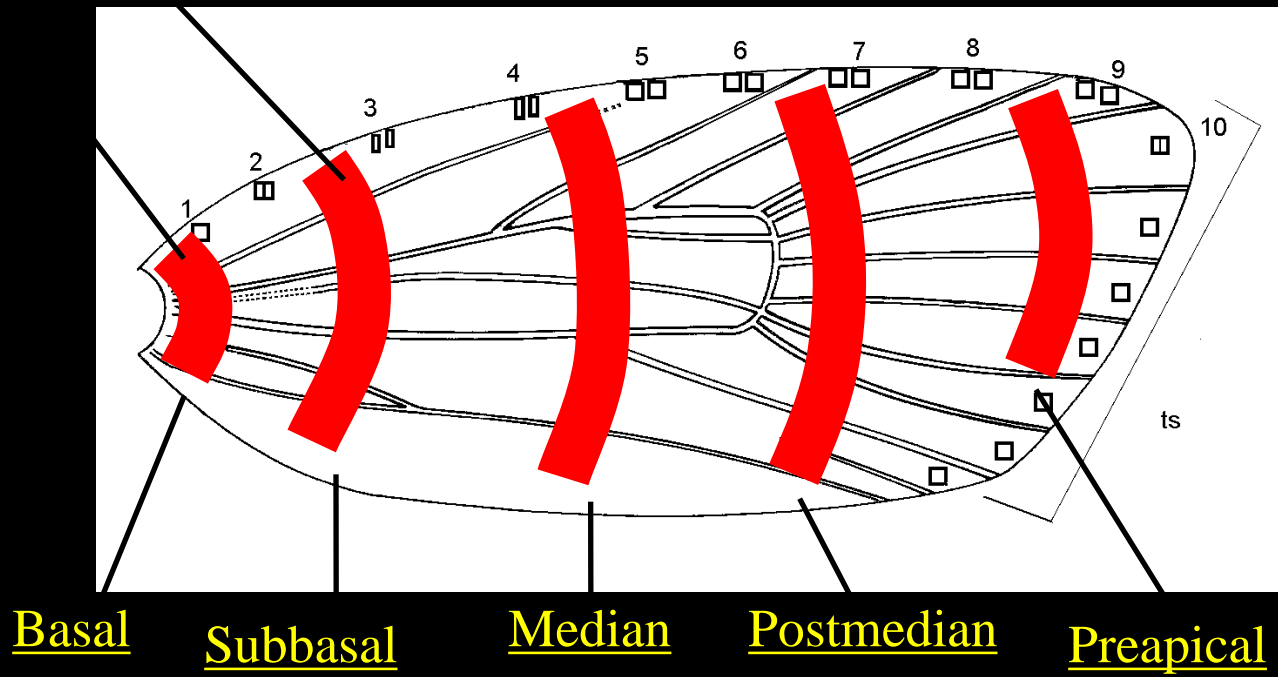


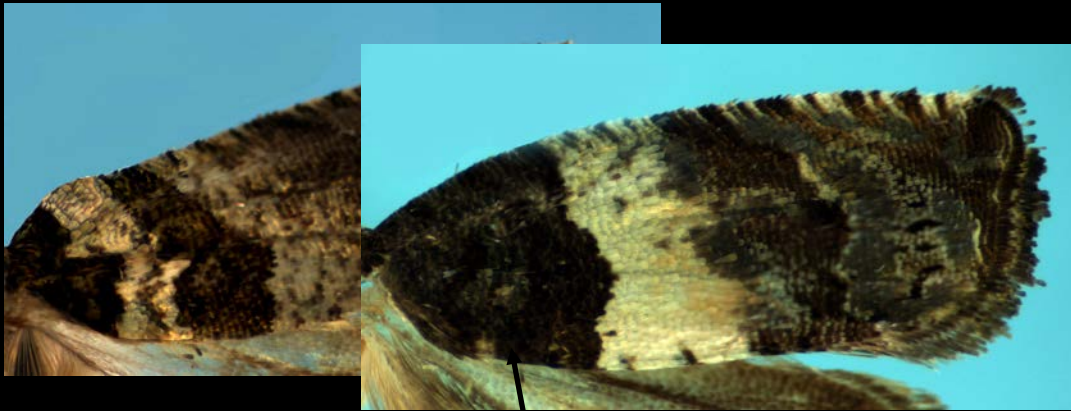






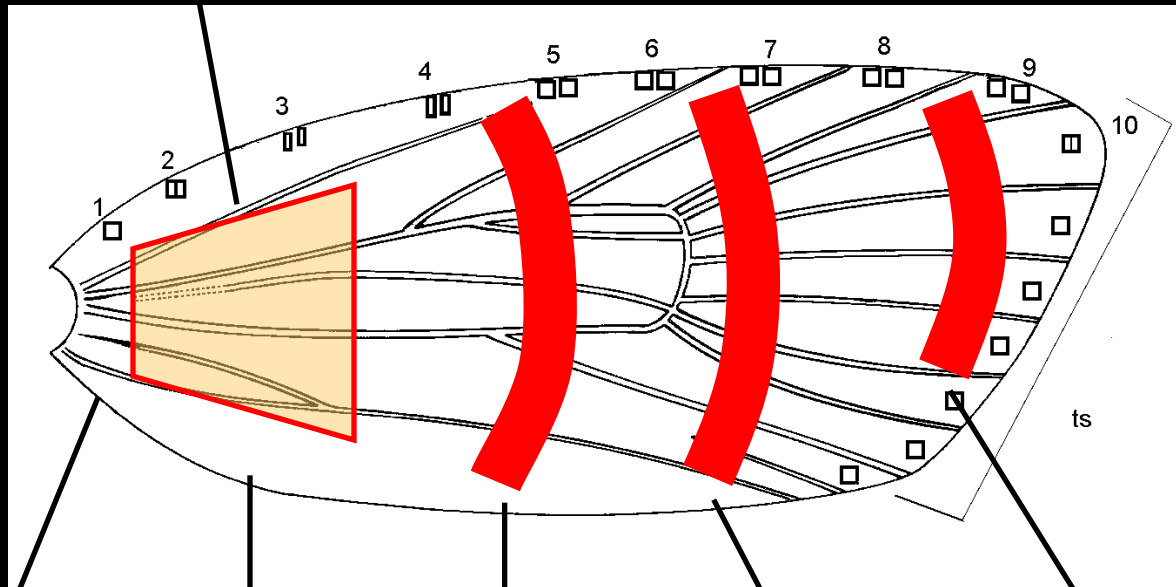
Fasciae





Progressive
effect of
suffusion

Fasciae



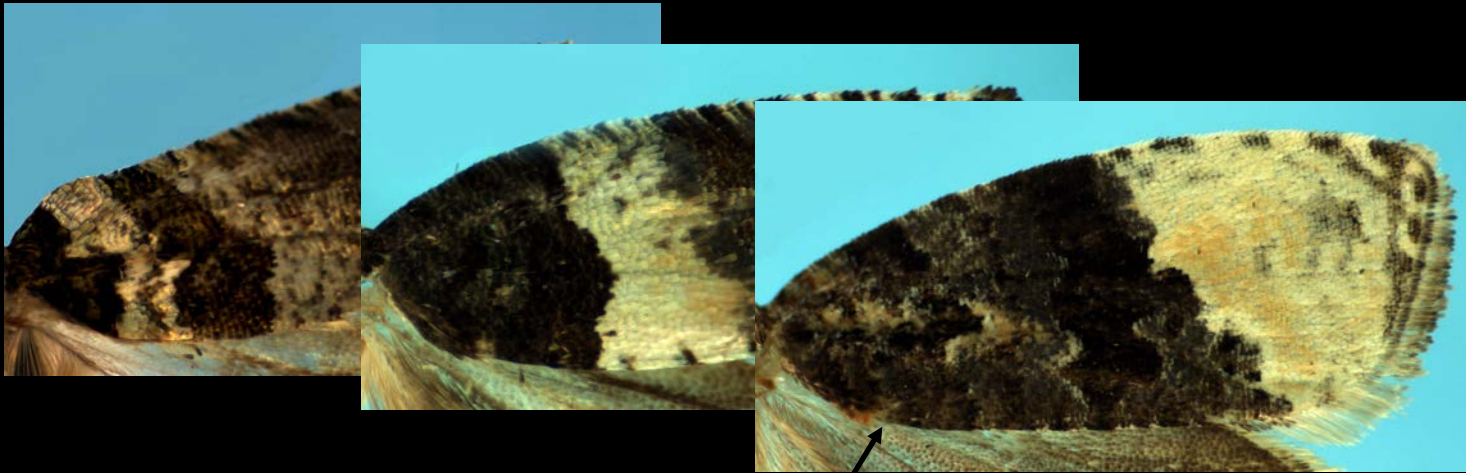
Basal

Subbasal

Median

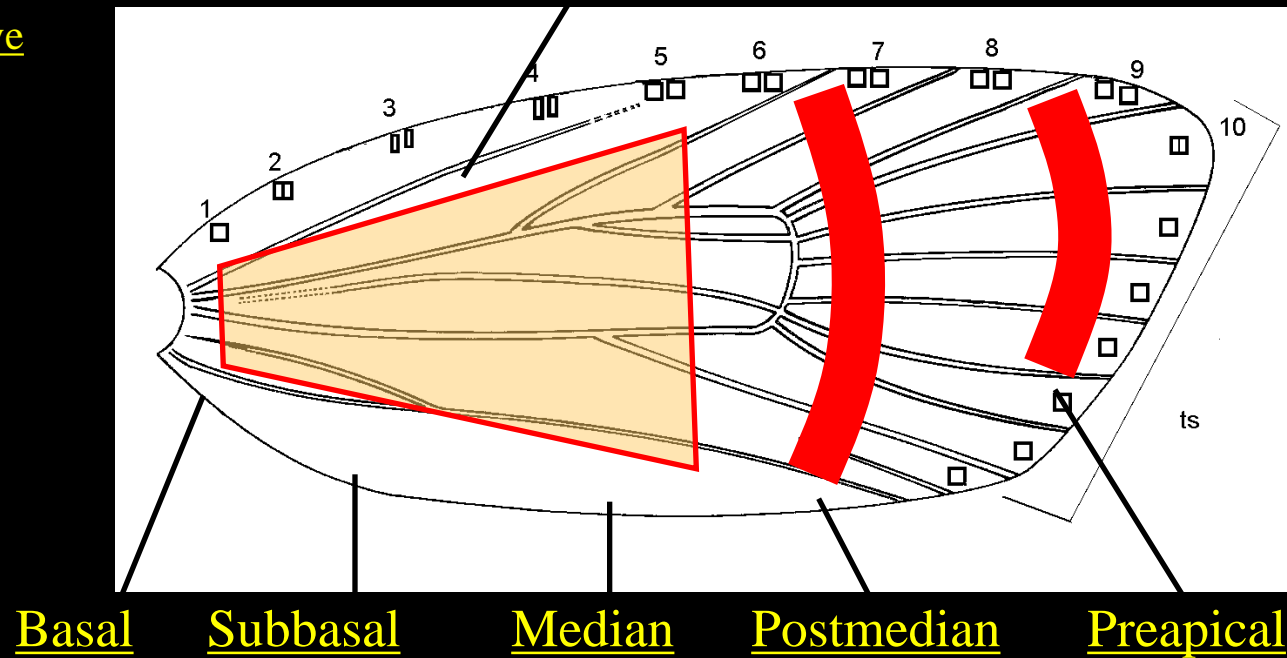
Postmedian

Preapical



Progressive
effect of
suffusion

Fasciae



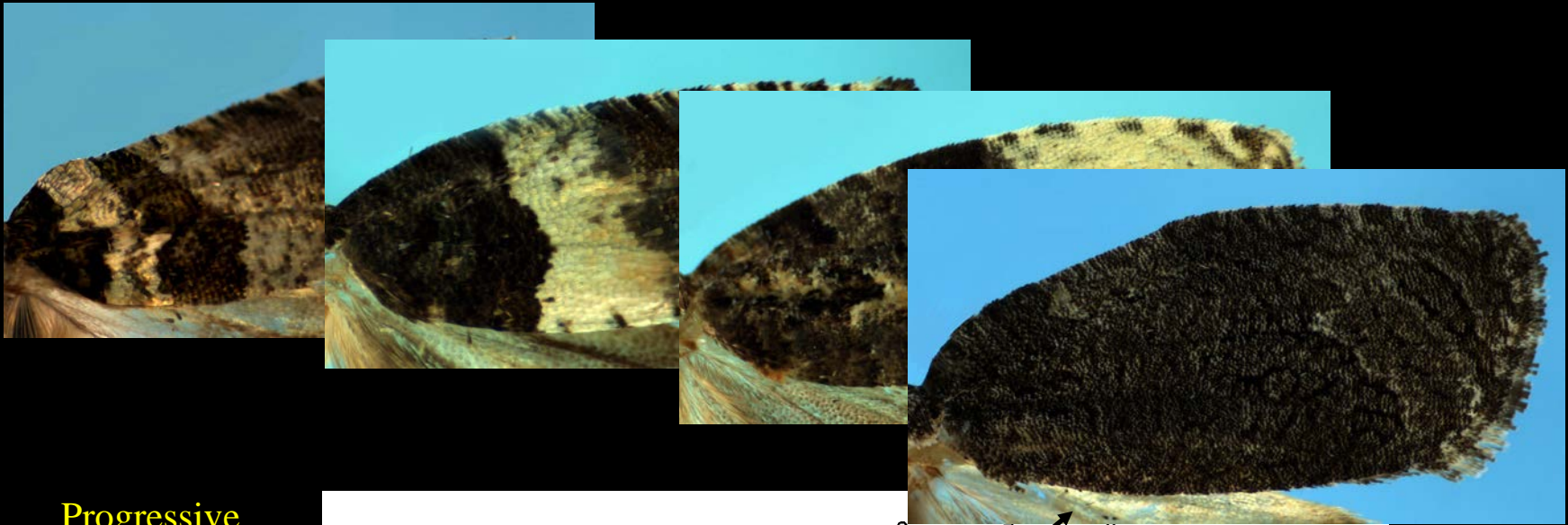
Basal

Subbasal

Median

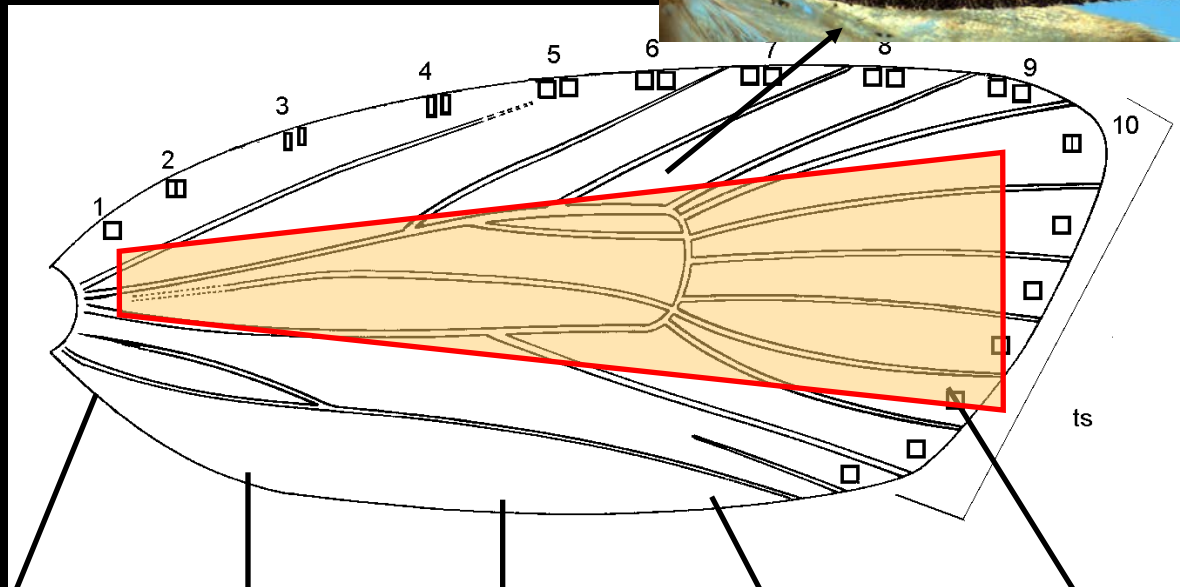
Postmedian

Preapical



Progressive
effect of
suffusion

Fasciae



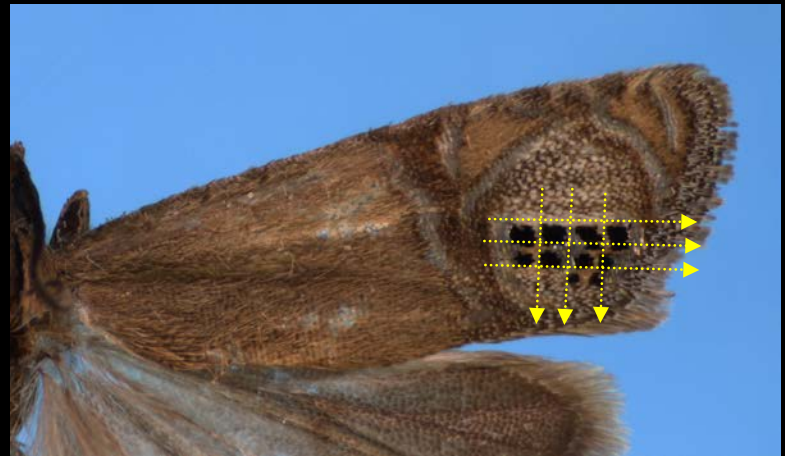
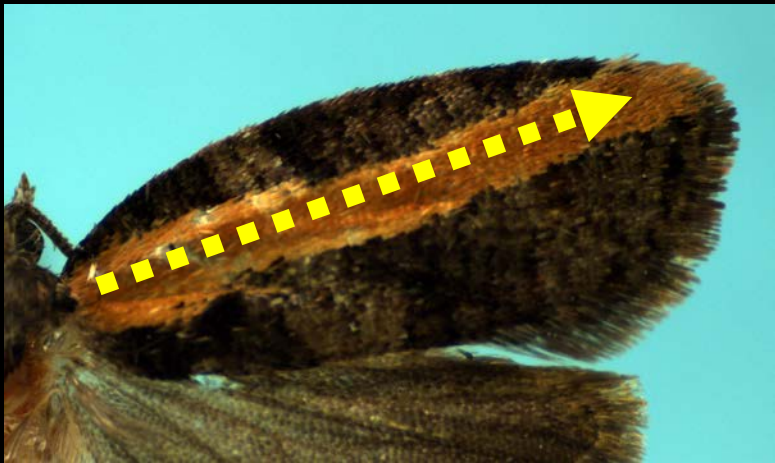
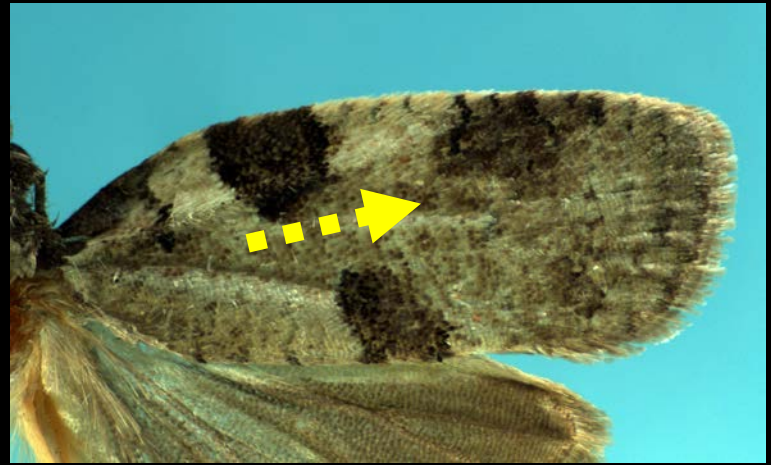
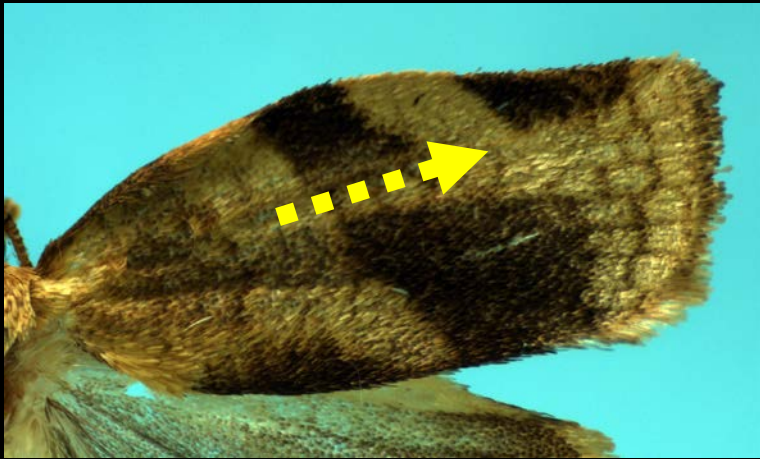
Basal

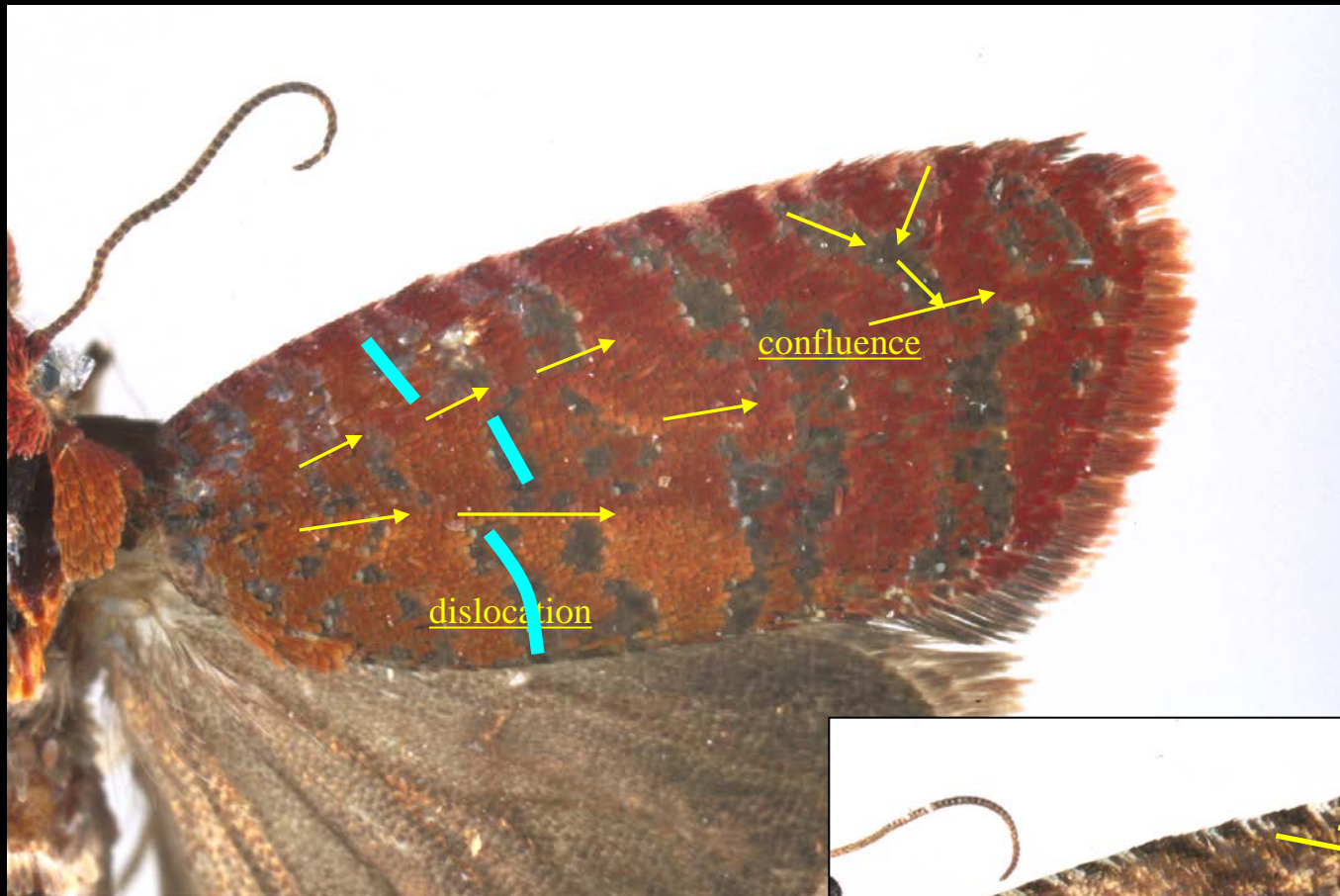
Subbasal

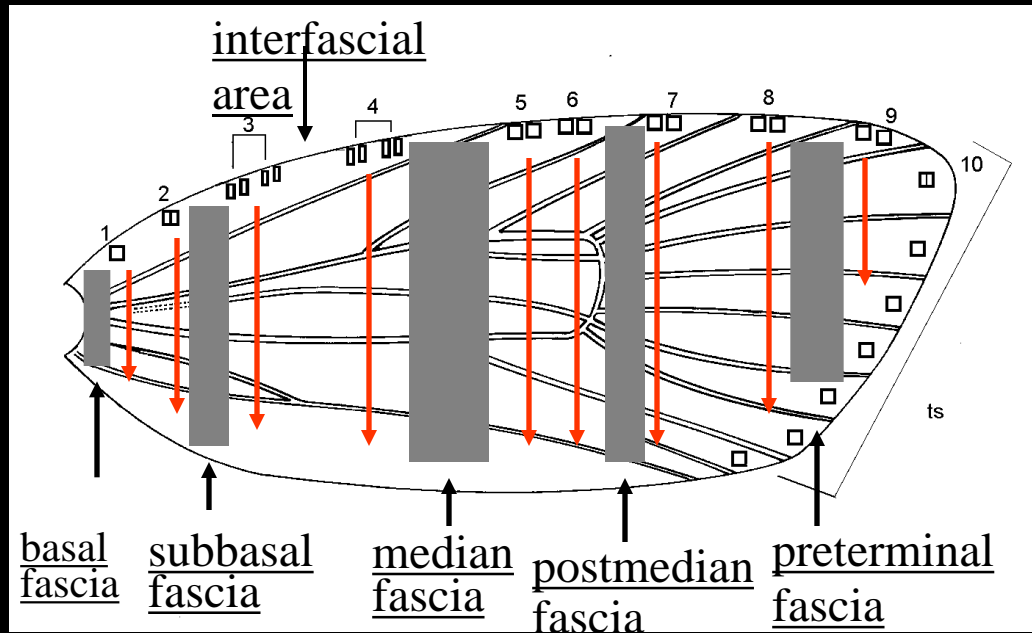
Median

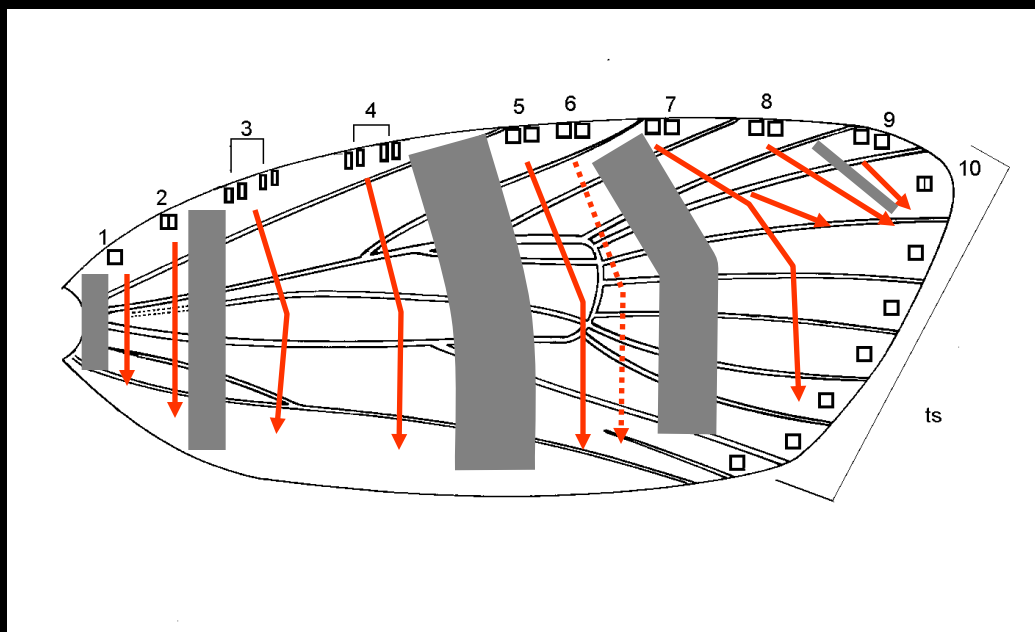
Postmedian

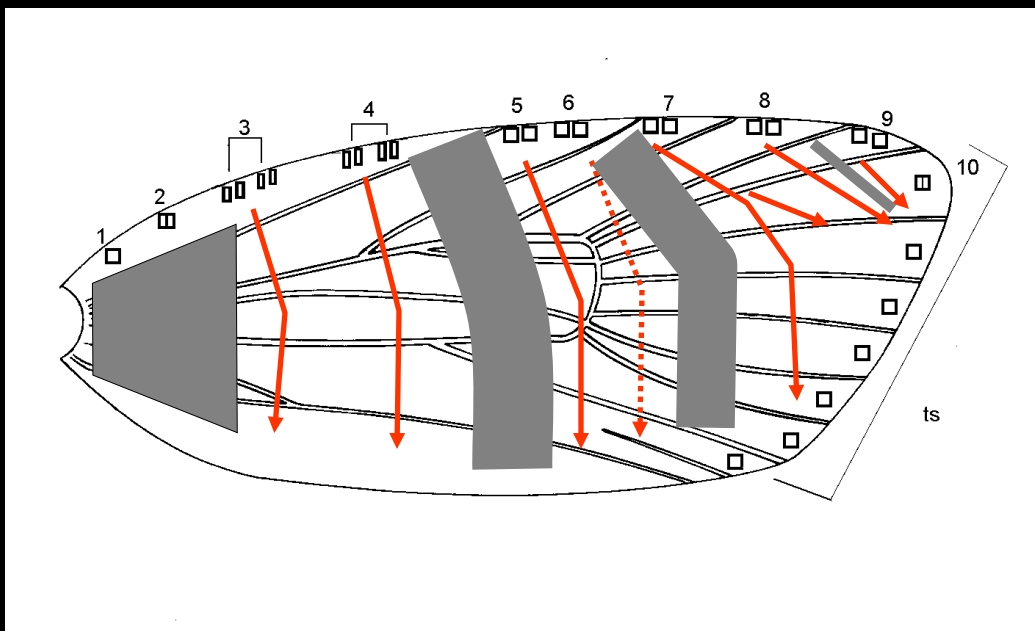
Preapical

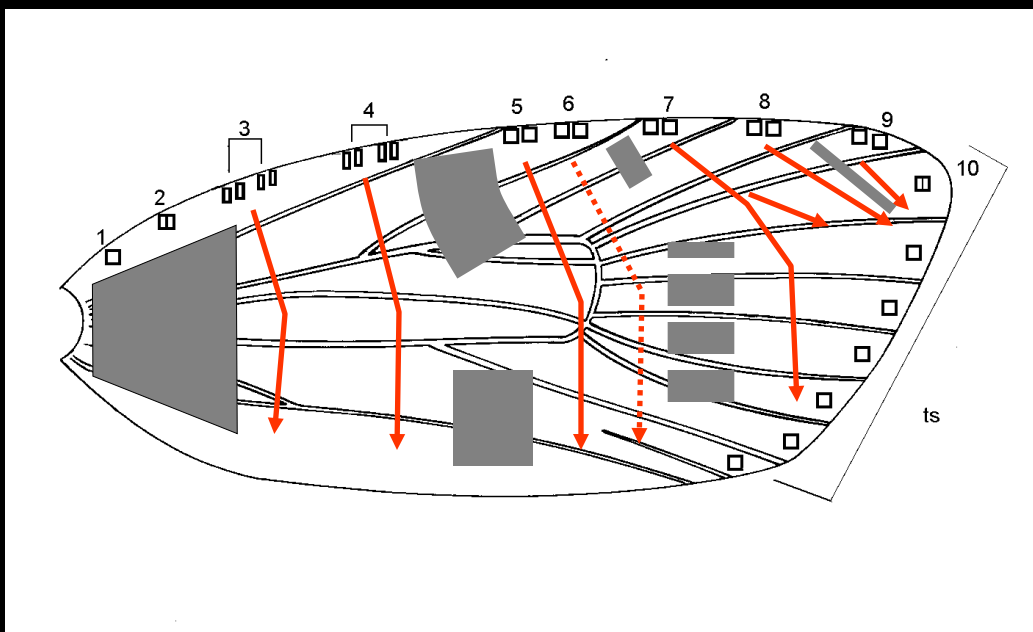




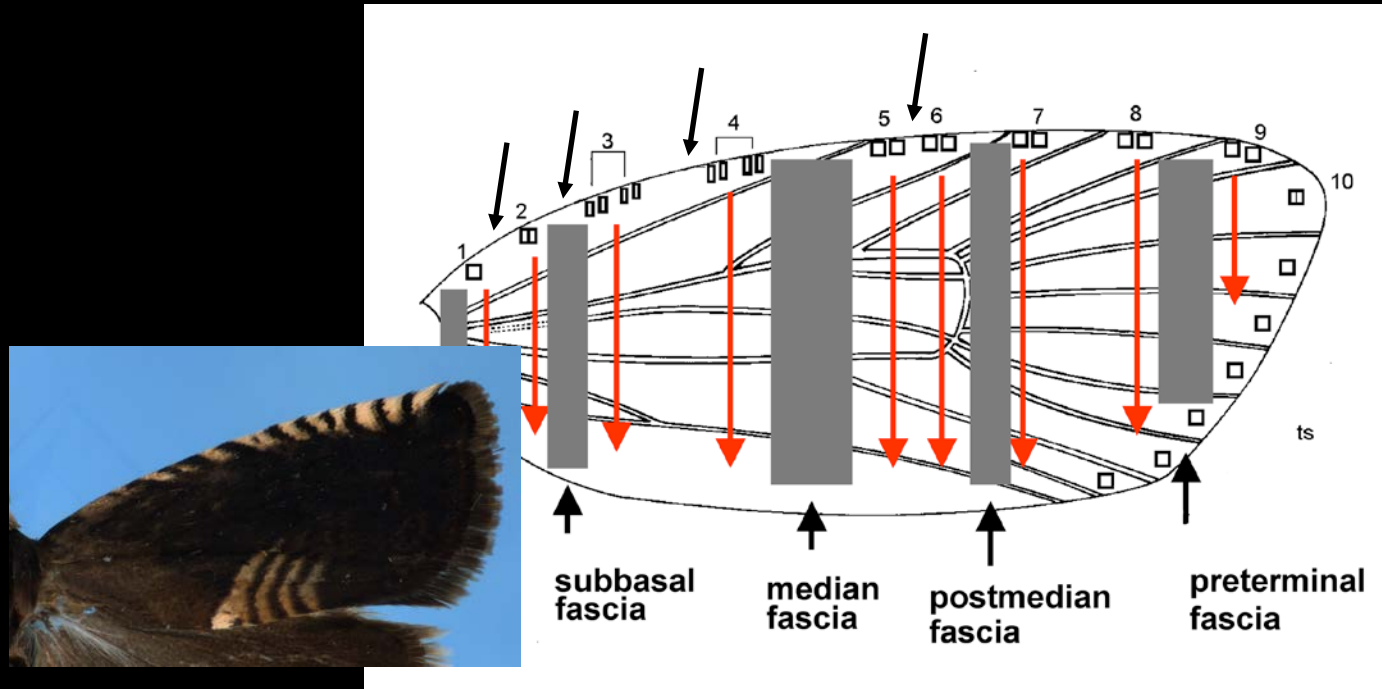








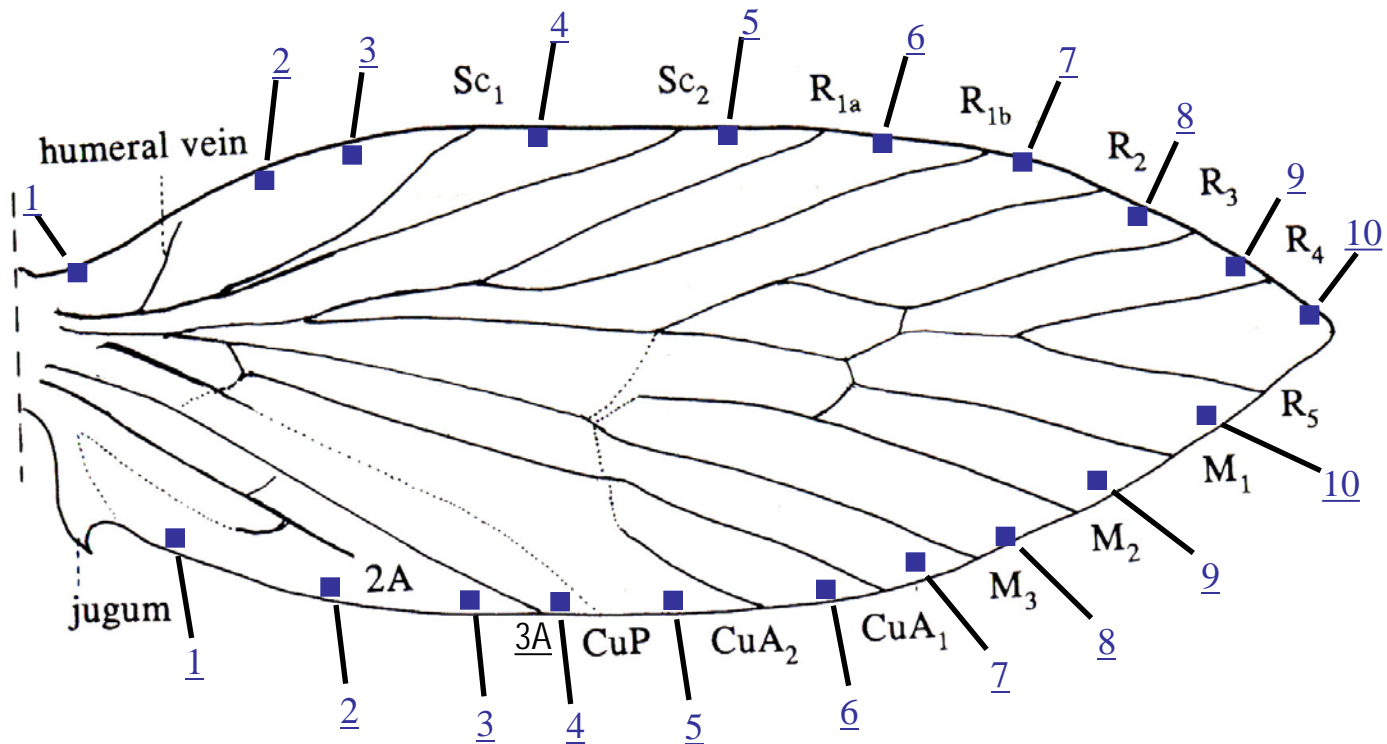
Strigulae 1-10 are foci for determining the position of five transverse fasciae on the forewing.



Does the absence of veins between some strigulae (foci) indicate loss of ancestral veins?

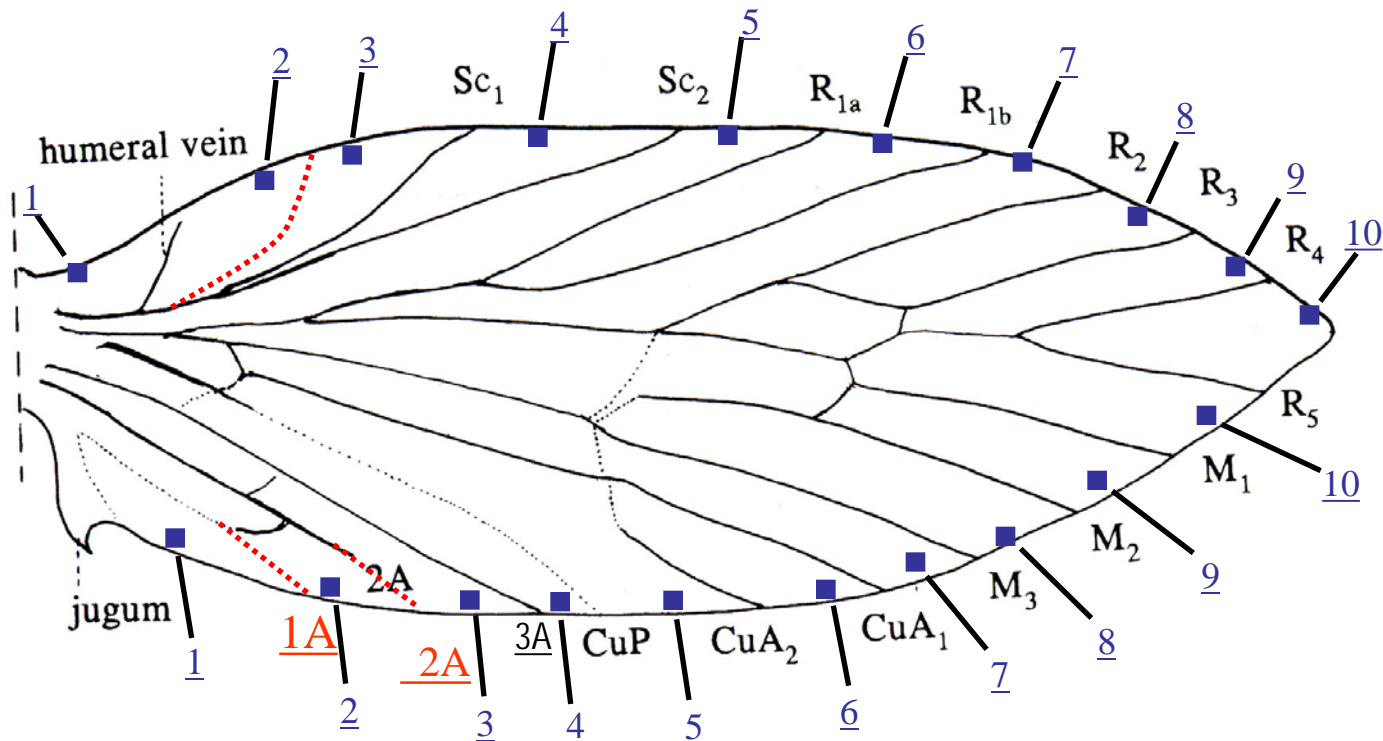
Are strigulae (foci) present on the wing dorsum?

Primitive Wing Venation of Micropterigidae

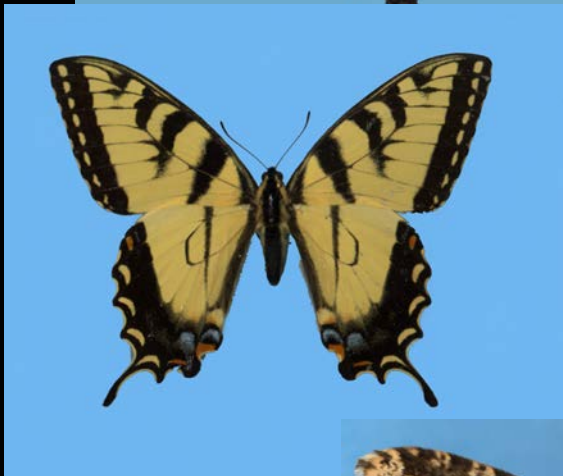
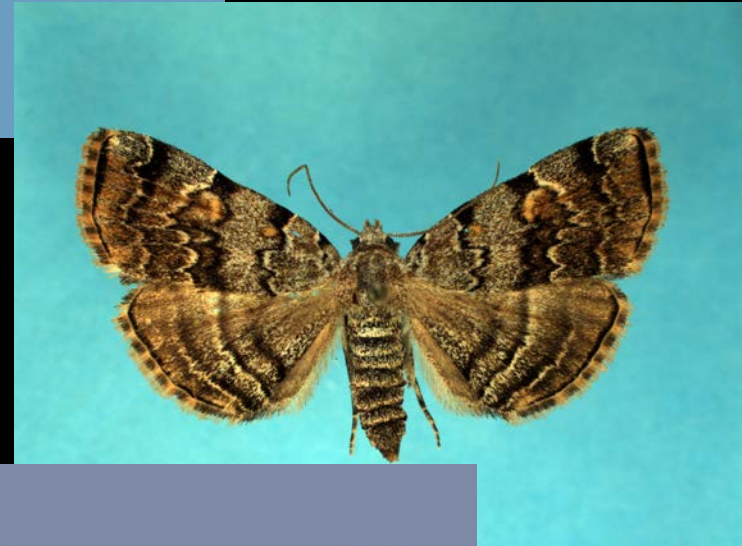


Sabatinca sp. (Micropterigidae). Adapted from Scoble, 1992

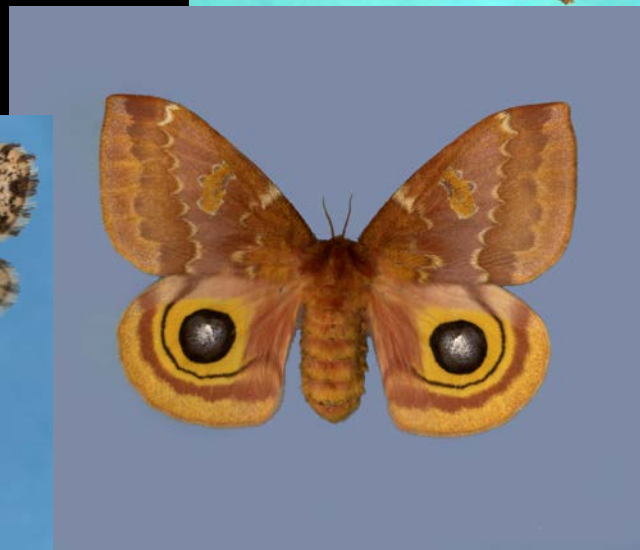
Primitive Wing Venation of Micropterigidae

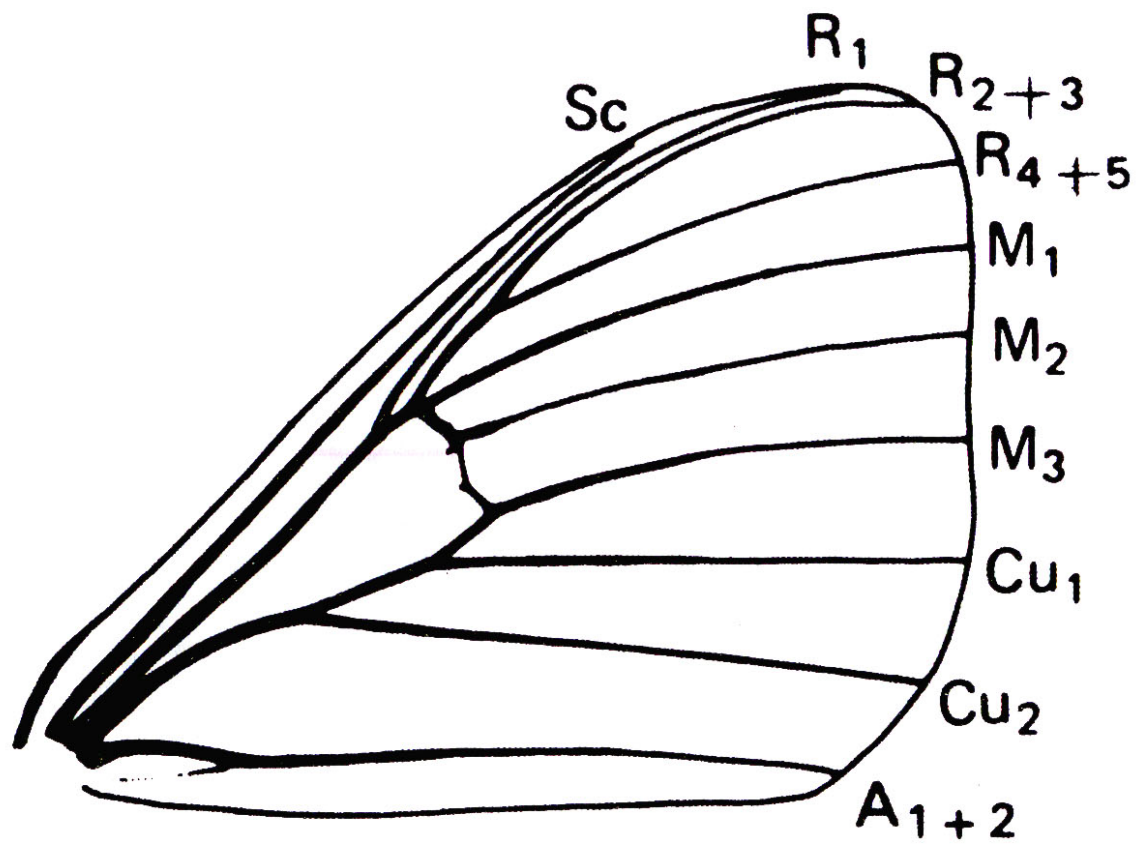


Sabatinca sp. (Micropterigidae). Adapted from Scoble, 1992

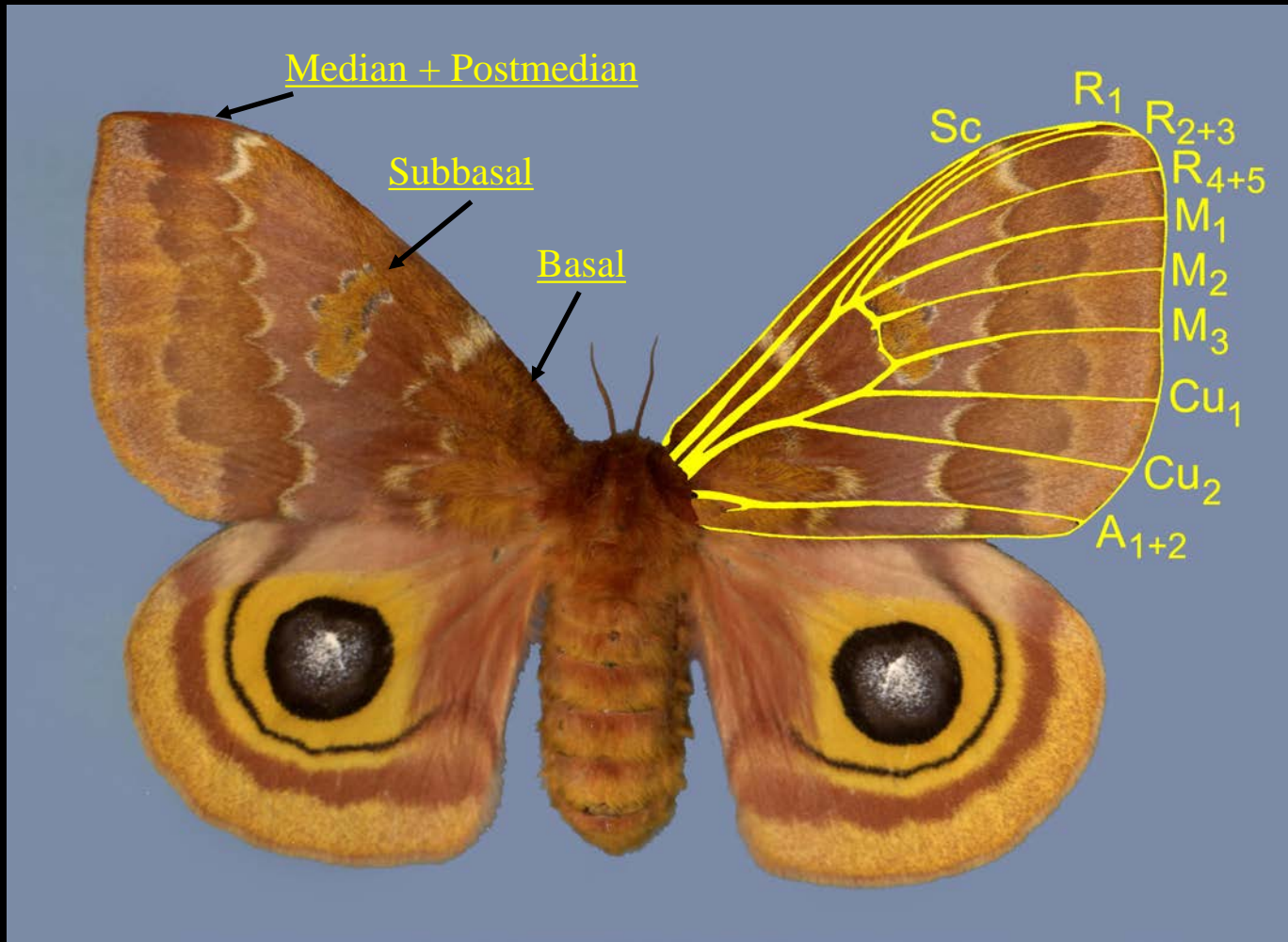


Can pattern elements of
Tortricidae be
homologized with other
Lepidoptera?









Questions